

## CLAIMS

1. A method of discriminating a sample for a sensor system which quantitates the concentration of a target substance contained in the sample by measuring electric current, said  
5 method comprising the steps of:

using a ratio of a measured current value to a time-differential value of the current value as a discriminating parameter;

10 defining a discrimination function for discriminating kinds of a plurality of objective samples, said discrimination function using said discriminating parameter as an independent variable;

15 using a numeric value obtained by substituting the value of said discriminating parameter into said discrimination function, as a discriminating index; and

discriminating the kind of any sample based on said discriminating index.

2. The method according to claim 1, wherein said discrimination function is defined by means of an expression  
20 using a plurality of said discriminating parameters.

3. The method according to claim 1, wherein said discrimination function is defined by means of a linear expression for said discriminating parameter.

25 4. The method according to claim 1, wherein said discrimination function is defined by means of an expression

of high degree for said discriminating parameter.

5. The method according to claim 1, wherein the kinds of the samples to be discriminated are a body fluid and a control fluid.

5 6. The method according to claim 5, wherein said sensor system is judged whether it is right or not based on a quantitated value of the concentration of the target substance contained in the control fluid, and then a resultant judgement is indicated.

10 7. The method according to claim 1, wherein when the value of said discriminating index is within a predetermined range that it is difficult to discriminate the kind of the sample, the kind of the sample is not discriminated while the purport is indicated.